ROTATION

```
#include<graphics.h>
#include<stdio.h>
#include<conio.h>
#include<math.h>
void main()
{
int gd=DETECT,gm;
int pivot_x,pivot_y,x,y;
double degree,radian;
int rotated_point_x,rotated_point_y;
initgraph(&gd,&gm,"C://TURBOC3//BGI");
cleardevice();
printf("\t\t********** ROTATION ********** \n");
printf("\n Enter an initial coordinates of the line = ");
scanf("%d %d",&pivot_x,&pivot_y);
printf("\n Enter a final coordinates of the line = ");
scanf("%d %d",&x,&y);
line(pivot_x,pivot_y,x,y);
printf("\n\n Now, Enter a degree = ");
scanf("%lf",&degree);
radian=degree*0.01745;
rotated_point_x=(int)(pivot_x +((x-pivot_x)*cos(radian)-(y-
pivot_y)*sin(radian)));
rotated_point_y=(int)(pivot_y +((x-pivot_x)*sin(radian)+(y-
pivot_y)*cos(radian)));
setcolor(RED);
```

```
line(pivot_x,pivot_y,rotated_point_x,rotated_point_y);
getch();
closegraph();
}
```